

## NOTES &amp; NEWS

Notes on the Collection of  
*Tritonia festiva* (STEARNS, 1873)  
from the Seas of Japan

(Gastropoda : Nudibranchia)

BY

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(1 Text figure)

*Tritonia festiva* (STEARNS, 1873)

*Lateribranchiaea festiva* STEARNS, 1873. - Monterey Bay.

*Tritonia festiva*, MARCUS, 1961. - Tomales Point.

*Duvaucelia festiva*, MACFARLAND, 1966. - Monterey Bay.

*Sphaerostoma undulata* O'DONOGHUE, 1924. - Vancouver Island region; O'DONOGHUE, 1926 (list).

*Duvaucelia undulata* var. *muroranica* BABA, 1940. - Muroran (Hokkaido); BABA, 1957 (list).

*Tritonia reticulata* BERGH, 1881. - Japan.

Here it is intended to give a summary of local information gained from the study of our specimens of *Tritonia festiva* which has, following MACFARLAND (1966) priority over *T. reticulata* BERGH, 1881. Possibly it has also priority over *Duvaucelia undulata* var. *muroranica*. The study material is listed below:

Specimens no. 1-4. Off Niigata, Japan Sea side of Japan, 70 m (August 2, 1958, coll. by Dr. G. Kato).

Sp. no. 5. Sado, Japan Sea side, shore (May 9, 1956, coll. by Dr. Y. Honma).

Sp. no. 6-10. Sado (May 20, 1966, coll. by Dr. I. Usuki).

Sp. no. 11. Abugashima, Toyama Bay, Japan Sea side, shore (July 23, 1951, coll. by Mr. T. Abe and the author).

Sp. no. 12. Abugashima, shore (April 29, 1967, coll. by Mr. T. Abe).

Sp. no. 13. Off Hayama, Sagami Bay, Pacific side of Japan (Jan. 18, 1966, coll. by Biological Laboratory, Imperial Household).

Sp. no. 14-16. Off Hayama (February 6, 1967, collector as above).

These specimens ranged usually from 20 mm to 50 mm in length, while the largest (specimen no. 14) showed the maximum length of 75 mm in the preserved state. In them the general ground colour of the back and sides

varied from a translucent whitish (specimen no. 11) or pale yellow (specimens no. 6, 7) to as far as a deep orange-red (specimens no. 5, 8-10, 13-16) or rather a purplish red (specimens no. 1-4 and 12). In every one of the specimens there occurred prominent figures of opaque white on the back. The maximum radular formulae for the specimens dissected were  $24 \times 30 \cdot 1 \cdot 1 \cdot 1 \cdot 30$  (specimen no. 11, body length 15 mm),  $35 \times 40 \cdot 1 \cdot 1 \cdot 1 \cdot 40$  (specimen no. 5, body length 20 mm),  $45 \times 80 \cdot 1 \cdot 1 \cdot 1 \cdot 80$  (specimen no. 3, body length 35 mm), and  $50 \times 90 \cdot 1 \cdot 1 \cdot 1 \cdot 90$  (specimen no. 16, body length 58 mm). The details of the radular teeth and jaw-plates were as usual in the genus *Tritonia*. The urn-shaped penis was proved to have an apical papilla in the centre of the terminal disc (specimens no. 3, 5, and 16).

A conclusive statement may follow that our specimens, though subject to variation in some respects, are possessed of two of the eminent characteristics of *Tritonia festiva* from the type locality: the first is the presence of the opaque white figures on the back, and the second lies in the formation of the apical papilla of the penis. This species, of which the type is known to be of a cream white, has thus a distribution in the Pacific North America and Japan, but so far there has been no record of collecting of this form from the regions between the two.

## ACKNOWLEDGMENTS

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Figure 1

*Tritonia festiva* (STEARNS, 1873)

A. Animal from above. Length 15 mm; specimen no. 11.

B. Left jaw from outside ( $\times 40$ ), specimen no. 11.

C. A half-row of radula ( $\times 200$ ), specimen no. 11.

D. A half-row of radula ( $\times 50$ ), specimen no. 16.

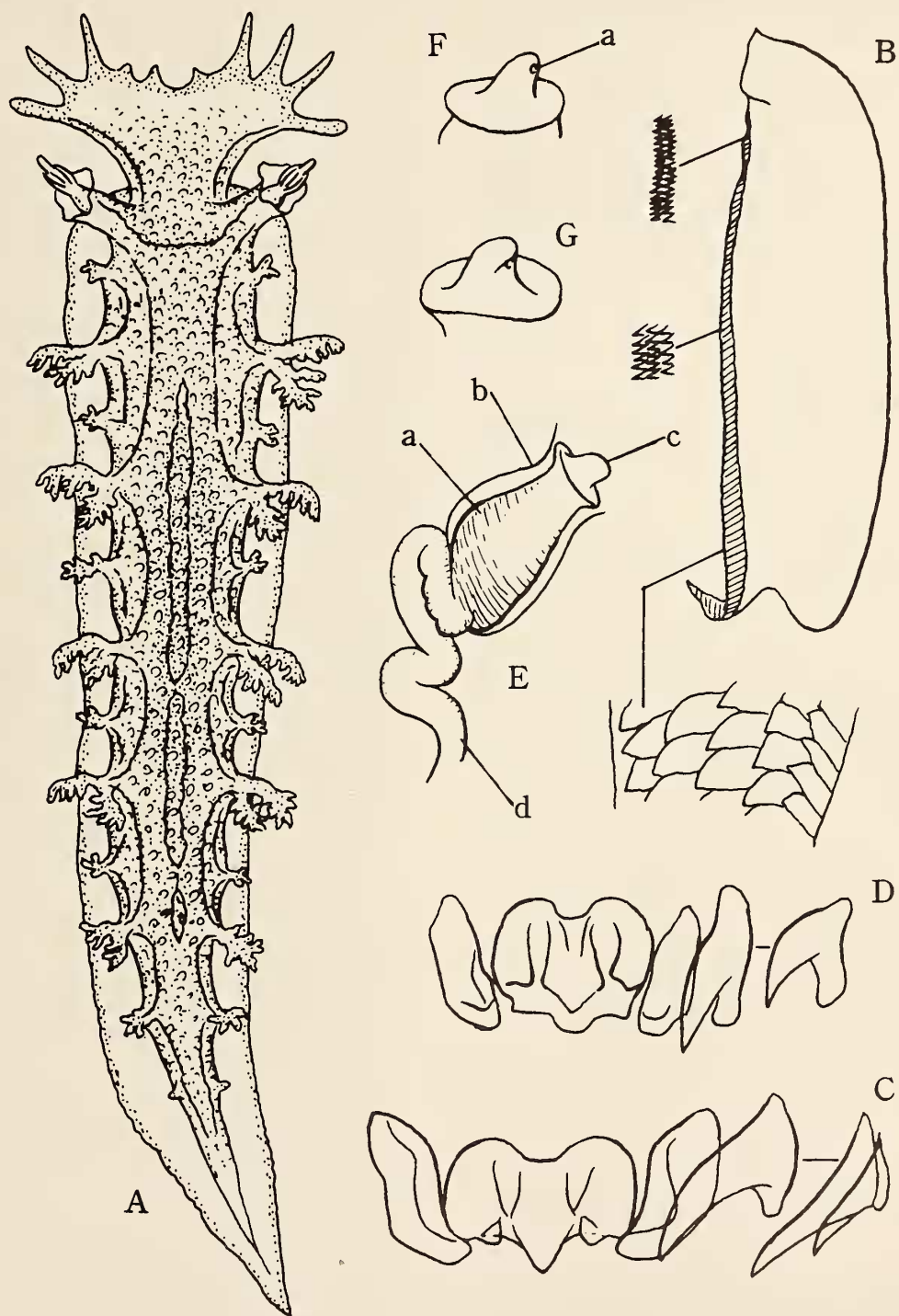
E. Distal part of male organ ( $\times 7$ ), specimen no. 16.

a) penis; b) penis sac; c) apical papilla; d) vas deferens

F. Terminal disk of penis. Specimen no. 3.

a) opening of vas deferens

G. Terminal disk of penis. Specimen no. 5.



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### Range Extension of

### *Tochuina tetraquetra* (PALLAS, 1788)

### to Hokkaido, North Japan

(Gastropoda : Nudibranchia)

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### *Tochuina tetraquetra* (PALLAS, 1788)

- Limax tetraquetra* PALLAS, 1788. -Kurile Islands.  
*Tritonia tetraquetra*, BERGH, 1879. - Unalaska (Aleutian Is.); O'DONOGHUE, 1922. - Victoria (Vancouver Island).  
*Tritoniopsis tetraquetra*, ODHNER, 1936.  
*Sphaerostoma tetraquetra*, O'DONOGHUE, 1926.

- Duvaucelia tetraquetra* MACFARLAND, 1966. - Petersburg (Alaska); San Francisco Bay; Monterey Bay.  
*Tritonia gigantea* BERGH, 1904. - Unalaska (Alaska).  
*Tritoniopsis aurantia* MATTOX, 1955. - Santa Catalina Island (Southern California); MARCUS, 1961.

In 1960 a single specimen of this notable species was collected by Dr. Minoru Imajima, formerly a member of the Shirikishinai Marine Biological Laboratory, Hokkaido Kyoiku University, from 140 meters depth off Shirikishinai near Hakodate, Hokkaido, Japan. As preserved, the animal was greatly damaged, but it showed the characteristics of the species in the thickly fringed rows of the gills on the back-margins, and in having an extremely large radula ( $90 \times 220 \cdot 1 \cdot 220$ ) consisting of a degraded unicuspidate central and simply hamate (not filiform) laterals. The total length of the body was more than 10 cm. From the above description it will readily be seen that this species constitutes one of those forms which cover in distribution the entire territory of the North Pacific from east to west.

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